

Patent Claims

1. A device (1) for guiding a loading floor (3), the height of which can be adjusted manually and which can be pivoted about a first spindle (9), of a motor vehicle, characterized by lever parts (7), which are arranged opposite one another, can be pivoted about a second spindle (11) and on which the loading floor (3) is pivotably mounted, and in that the loading floor (3) can be adjusted between a lower loading floor position and an upper loading floor position by a pivoting movement of the lever parts (7).

2. The device as claimed in claim 1, characterized in that the first and second spindles (9, 11) run parallel to one another.

3. The device as claimed in claim 1 or 2, characterized in that the second spindle (11) is arranged in a fixed position with respect to the bodyshell of the motor vehicle.

4. The device as claimed in claim 1, characterized in that in the upper loading floor position the first spindle (9) is arranged above the second spindle (11), as seen in the direction of the force of gravity.

5. The device as claimed in claim 4, characterized in that in the upper loading floor position the first spindle (9) is arranged in such a way with respect to the second spindle (11) that the resulting forces which are transmitted via the loading floor (3) to the lever parts (7) are oriented substantially in the direction of the bearing center of the lever parts (7).

6. The device as claimed in one of claims 1 to 5, characterized in that in the lower loading floor position the first spindle (9) is arranged below the second spindle (11), as seen in the direction of the force of gravity.

7. The device as claimed in claim 6, characterized in that in the lower loading floor position the first spindle (9) is arranged in such a way with respect to the second spindle (11) that torque is applied to the lever parts (7) by the force of the weight of the loading floor (3) acting on them.

8. The device as claimed in claim 7, characterized in that the torque is directed in the pivoting direction of the loading floor (3) during the adjustment of the latter from the lower loading floor position into the upper loading floor position.

9. The device as claimed in claim 1, 5 or 7, characterized by a device (25) for limiting the pivoting angle (α) of the lever parts (7).

10. The device as claimed in claim 1, characterized in that for the pivotably movable bearing of the loading floor (3) on the lever parts (7), there is in each case a bearing journal arranged in a bearing bore.

11. The device as claimed in claim 10, characterized in that a rigid bearing spindle is provided instead of the bearing journals for the purpose of reinforcing the loading floor (3) or the lever mechanism.

12. The device as claimed in claim 1, characterized in that the loading floor (3) can be fixed in the lower loading floor position and the upper loading floor position by means of a locking device.

13. The device as claimed in one of claims 1 to 12, characterized in that at least one of the lever parts (7) is subject to spring force in order to overcome a dead center position of the lever parts (7) and/or to displace the lever parts (7) into a limit position.

14. The device as claimed in claim 1, characterized in that the loading floor (3) is supported on one side.

15. The device as claimed in claim 1, characterized in that the lever parts (7) are designed as rotary disks (27) or pivot levers (29).